

21 February 1996

Eric P. Newman 6450 Cecil Avenue St. Louis, Missouri 63105

Dear Eric:

Let me begin by apologizing for the long delay in responding to your October letter. Though excuses are not worth much, you caught us at a very busy time with school tours and myself with two major trips. In any event, thank you for sending along the material regarding Nature Printing by Franklin and the inquiry regarding the currency.

As to the currency, I have kept them at the top of my desk these many months pondering the production methods possible. My observations of the two notes are as follows:

20 Shilling Note

- there is a cut line in the numbers "77" of 1773, just underneath the red column of type. This leads me to assume there was one engraving used, but the separation of colors was first demarcated with a cut
- there seems to be a clear cut line around the red type
- the red type always seems either more worn or bolder or cruder than the black

15 Shilling Note

- on GEORGE, the letter "R" in red seems to have a spur or something rather than a straight vertical shank for the letter as it should
- the only mixture or overlap of colors I see on both notes is at the top of the 15 S note in the "HI" of shilling.

I understand the process you described of making the papier mache stereo and using it as a shield for the inking of each color. The problems I have with this description is that when you ink up the type with the ink balls, the mask will immediately stick to the leather on the balls. This would be less of a problem for the mask covering the black type since it could be made large enough to overhang the plate and be held down somehow.

But with the mask for the red type, the mask pieces would be so movable or loose with no way to secure them; their shape would not permit either wire or an overhang since the red is completely enclosed within an engraved border and type. Also, if the masks even moved just slightly, the second ink (whether red or black) would mix with the first ink. The examples shown do not give any evidence of such mixing. I would imagine, however, that it would be extremely difficult, if not impossible, to keep such small masks from moving at all and yet still keep them from adhering to the ink balls.

Some possibilities I would guess at:

• the red ink could have been applied without the ink balls, ie. with the fingers or by a brush after the masking process

Founded in 1988 by David Jacobson.

A project of the non-profit Int'l Printing Museum Foundation, featuring the Ernest A. Lindner collection of Antique Printing Machinery.

• the engraved block was cut with a knife or blade to separate red and black areas
• Peter Schoeffer, Gutenberg's assistant and predescessor, achieved 3-color perfect
registration printing in 1465 by this method: the ornate engraving was lifted out
of the black printing form and ink separately in blue then placed back into the
form; an additional piece, called a kernal, which represented the inside portion of
part of the blue engraving, was also inked separately in red and placed into the
blue engraving. With one pull on the bar, three colors were printed, in tight
registration. It is possible that this printed employed a similar technique where
the pieces were lifted out of the locked up form and inked in the separate color.

• I considered the possibility of the printer working with two identical stereotype copies of the engraving, one where the black type was smashed down, leaving the red raised up; the other with the red smashed down. My problem with this is that the art of stereotyping was not practiced by American printers until 1815 or 1820, though the Europeans had be experimenting with it for close to 100 years.

• the fact that the "77" is cut exactly underneath the red column of type suggests to me that it should have been partially inked in red but wasn't, and therefore, possibly it indicates only one solid engraving for both colors. It could just be damaged type, since the "7" on 1773 on the 15 S note also has a cut mark.

A note regarding the printing. The paper was dampened before printing and had to remain damp for the printing of the reverse side; if the paper dried it would have shrunk slightly and the printing of engravings especially would be next to impossible on a wooden press.

This exhausts me of my ideas regarding the notes. I find the hypothesis you propose interesting and certainly possible, but technically I see too many difficulties with executing it on a large scale with success. Maybe an experiment could be made with the ideas, either here or at Colonial Williamsburg at their print shop.

I hope this is somewhat helpful for you. Please don't hesitate to call if I can be of any further assistance; I promise not to put it off this long next time! You might consider talking to Elizabeth Harris at the Smithsonian for ideas or Steve Saxe, printing historian, in NY at (914)948-4363.

With best regards,

Mark Barbour

Director and Curator

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